EPI-LOG

Communicable Disease and Epidemiology News
Published continuously since 1961
Laurie K. Stewart, MS, Editor (laurie.stewart@metrokc.gov)

Public Health
Seattle & King County
HEALTHY PEOPLE. HEALTHY COMMUNITIES.
Epidemiology, Prevention Division
Wells Fargo Center
999 Third Avenue, Suite 900
Seattle, WA 98104-4039

Return Services Requested

PRSRT STD
U.S.Postage
PAID
Seattle, WA
Permit No. 1775

Vol. 44, No. 9 **September 2004**

The Health Care Provider and Post-Exposure Prophylaxis for Communicable Diseases

Consider the following two scenarios.

1) An 18-year-old with fever, headache, stiff neck, and petechial lesions is admitted early Saturday morning after evaluation in the hospital emergency department (ED). He is accompanied by his extended family and several friends. Gram-negative diplococci are seen in the cerebrospinal fluid, and meningococcal meningitis is suspected. Intravenous antibiotics are administered to the patient, and ciprofloxacin is liberally offered to staff who may have had contact with the patient in the ED (although most did not have intimate contact with the case).

Public Health is notified of the case by the hospital epidemiologist on Monday (whoops – this is an immediately notifiable condition by the health care provider) when a positive culture result for *N. meningitidis* is reported by the laboratory. The patient's friends and family members are no longer present, and there is no record of their names or contact information in the clinical note. After numerous phone calls, these persons are finally located and several intimate close contacts are identified that have been exposed to the patient's respiratory secretions and require post-exposure prophylaxis (PEP).

2) A 35-year-old male physical therapist is seen by his primary care physician for a cough of two weeks duration. The patient reports that there have been cases of pertussis in his son's school recently, and he recalls that his son was treated for pertussis about a month ago. The physician astutely suspects pertussis, obtains a pertussis culture (after donning a mask and eye protection), and prescribes a course of azithromycin. The patient's wife, an intensive care unit nurse, accompanied him to the appointment and also has a cough illness of 7 days duration, but remains in the office waiting room (coughing quietly). This information is not elicited in the clinical history. The physician does not inquire about other work or social contacts of his patient with symptoms compatible with pertussis.

Missed opportunities

These scenarios illustrate several missed opportunities for the primary care physician to optimally manage common communicable diseases of public health significance. Delays and missed opportunities in administering PEP to contacts can result in preventable serious illnesses, which can spread to others in the community, including those in high-risk environments, such as hospitals. In both outbreaks of naturally-occurring diseases, and potential bioterrorism, mass administration of post-exposure prophylaxis and/or vaccine may be recommended.

It is important to obtain a thorough social history from cases with communicable diseases of public health significance, eliciting contacts/exposures that may require PEP.

In fact, Washington Administrative Code (WAC) 246-101 states that **"health care providers are to provide adequate and understandable instruction in disease control measures to each patient who has been diagnosed with a communicable disease,** ***and to contacts that may have been exposed to the disease".***

Whenever possible, as described in the WAC**,** health care providers should identify contacts of their patients who are at risk for disease, and administer PEP when indicated. This is optimally done when the contacts are on-site. Referring patients to other health care providers or facilities for PEP can result in failure of the contact to receive preventive therapy in a timely manner, or at all. This is particularly important since prompt administration of PEP is more effective. If exposed persons are not immediately available, recording their names and contact information and reporting this information to Public Health will help facilitate the investigation and follow-up.

For patients who are indigent and/or cannot pay for medications, Public Health can arrange for medications to be dispensed by hospital pharmacies and some community pharmacies at no charge to the patient. That pharmacy is then replenished by Public Health. If appropriate, Public Health clinics can also see patients for PEP during business hours (after consultation with the Communicable Disease Section), and administer therapies that may not readily available such as immune globulin, and vaccines for hepatitis A, hepatic B, measles. Public

Health can provide assistance in evaluation of persons for PEP and, when necessary, help facilitate administration of preventive therapy. You can reach Public Health's Communicable Disease Section 24/7 at (206) 296-4774. After hours, a medical epidemiologist is on-call to assist with urgent consultations.

How do I determine who is a candidate for PEP?
Diseases requiring PEP of contacts after exposure to an infected person include (but at not limited to) pertussis, hepatitis A, hepatitis B, meningococcal disease, tuberculosis, and measles. Contacts of persons with sexually transmitted diseases (STDs) should also be evaluated and treated if indicated (for more information on STDs, see: www.metrokc.gov/health/apu/std). Rabies PEP should be recommended for exposures to potentially rabid animals after consultation with Public Health.

To determine if PEP is indicated for a particular person, the following questions must be answered:

1) How is the disease transmitted (respiratory droplets, airborne, fecal-oral, sexual contact etc)?
2) What is the nature of the contact with/exposure to the ill person?
3) Is the contact susceptible to the disease they have been exposed to (immunization history, past infection)?
4) Are there contraindications to PEP?
5) Can PEP be administered within the recommended time frame to be effective?

Public Health can help you identify candidates for prophylaxis based on the specific infection and the circumstances relevant to your patient.

Where is rabies PEP available?
Hospitals are the only places where both rabies immune globulin and rabies vaccine (both of which are required for the first dose of PEP) are routinely stocked. Inventories can change day by day, so the hospital pharmacy or ED should be contacted prior to sending someone to a hospital for rabies PEP. After the first dose of immune globulin and vaccine, the follow-up shots can be administered by the primary care provider or other outpatient clinic (see web address below for information on ordering rabies vaccine). Potential rabies exposures should be reported promptly to Public Health at (206) 296-4774.

For comprehensive information about rabies exposure assessment and management and rabies vaccine, see:
www.metrokc.gov/health/providers/epidemiology/rabies

APIC Chapter Will Hold Infection Control Education Day on October 22nd

The Puget Sound APIC (Association of Professionals in Infection Control and Epidemiology) Chapter is sponsoring an educational meeting called "Sail Through Infection Control: Learning the Ropes" in Silverdale Washington on October 22nd, from 8-4 PM. The cost is $75 ($65 for APIC members). For more information and to register, please contact Ira Rice at (360) 754-3333 or mailto:ira.rice@hcahealthcare.com or visit the Puget Sound ACIP website at:
http://www.pugetsoundapic.org/Education.htm

Disease Reporting

AIDS/HIV	(206) 296-4645
STDs	(206) 731-3954
TB	(206) 731-4579
All Other Notifiable Communicable Diseases (24 hours a day)	(206) 296-4774
Automated reporting line for conditions not immediately notifiable	(206) 296-4782

Hotlines

Communicable Disease	(206) 296-4949
HIV/STD	(206) 205-STDS

Online Resources

Public Health Home Page: www.metrokc.gov/health
The *EPI-LOG*: www.metrokc.gov/health/providers
Subscribe to the Public Health Communicable Disease listserv (PHSKC INFO-X) at:
http://mailman.u.washington.edu/mailman/listinfo/phskc-info-x

Reported Cases of Selected Diseases, Seattle & King County 2004

	Cases Reported in August		Cases Reported Through August	
	2004	2003	2004	2003
Campylobacteriosis	38	24	179	166
Cryptosporidiosis	5	2	21	31
Chlamydial infections	517	372	3,480	3,314
Enterohemorrhagic *E. coli* (non-O157)	0	0	0	0
***E. coli* O157: H7**	9	3	27	19
Giardiasis	8	12	81	75
Gonorrhea	94	102	745	916
***Haemophilus influenzae* (cases <6 years of age)**	0	0	2	0
Hepatitis A	0	1	6	18
Hepatitis B (acute)	1	1	16	20
Hepatitis B (chronic)	59	45	415	385
Hepatitis C (acute)	0	1	7	7
Hepatitis C (chronic, confirmed/probable)	86	74	824	646
Hepatitis C (chronic, possible)	27	15	243	155
Herpes, genital (primary)	51	34	489	426
HIV and AIDS (includes only AIDS cases not previously reported as HIV)	39	20	289	288
Measles	0	0	6	0
Meningococcal Disease	1	0	12	3
Mumps	1	0	1	0
Pertussis	17	25	149	166
Rubella	0	0	0	0
Rubella, congenital	0	0	0	0
Salmonellosis	36	19	159	153
Shigellosis	7	4	44	74
Syphilis	15	7	85	57
Syphilis, congenital	0	0	0	0
Syphilis, late	3	2	42	29
Tuberculosis	5	18	88	108

The *Epi-Log* is available in alternate formats upon request.